



PATENT  
Docket No. 000324US

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Applicant(s): Timothy E. Benson ) Group Art Unit: 1645  
Serial No.: 09/825,212 ) Examiner: unknown  
Confirmation No.: 2707 )  
Filed: April 3, 2001 )  
For: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF  
STAPHYLOCOCCUS AUREUS THIOREDOXIN REDUCTASE

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington D.C. 20231

Sir:

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with C.F.R. §§ 1.97 *et. seq.*, the materials enclosed herewith are brought to the attention of the Examiner as possibly being of interest in connection with the above-identified patent application. Consideration of each of the documents listed on the attached 1449 forms is respectfully requested. Pursuant to the provisions of M.P.E.P. §609, Applicant further requests that a copy of the 1449 forms, marked as being considered and initialed by the Examiner, be returned with the next Official Communication.

It is believed that no fee is due, as this Information Disclosure Statement is filed prior to the receipt of any Action on the merits. However, in the event a fee is due, please charge any fee or credit any overpayment to Account No. 13-4895.

**Information Disclosure Statement**

Page 2 of 2

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Serial No.: 09/825.212

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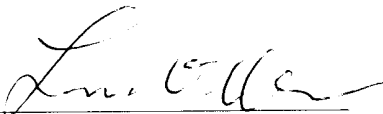
Filed: April 3, 2001

For: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF *STAPHYLOCOCCUS AUREUS* THIOREDOXIN REDUCTASE

The Examiner is invited to contact Applicant's Representatives at the below-listed telephone number, if they can be of any assistance during prosecution of the present application.

**CERTIFICATE UNDER 37 C.F.R. 1.8:**

The undersigned hereby certifies that this paper is being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on this 12 day of February, 2002.



Loren D. Albin

February 12, 2002  
Date

VAS:LDA:LMG

Respectfully submitted for  
Timothy E. Benson

By

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P.O. Box 581415

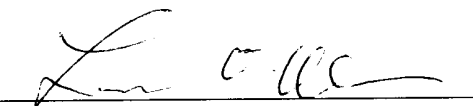
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<b>INFORMATION DISCLOSURE STATEMENT</b>	Atty. Docket No.: 00032.US1	Serial No.: 09/825,212
	Applicant(s): Timothy E. Benson	Confirmation No.: 2707
	Filing Date: April 3, 2001	Group: 1645

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## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	none					

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No
	EP 786 519 A2	07/30/97	Europe				
	WO 99/47639 A2	09/23/99	PCT				
	WO 99/47662 A1	09/23/99	PCT				
	WO 00/12678 A2	03/09/00	PCT				
	WO 00/12678 A3	03/09/00	PCT				
	WO 01/16292 A2	03/08/01	PCT				

## OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initial	Document Description
	Åslund et al., "The thioredoxin superfamily: redundancy, specificity, and gray-area genomics," <i>J Bacteriol.</i> 1999 Mar;181(5):1375-9.
	Bartlett et al., "CAVEAT: A program to facilitate the structure-derived design of biologically active molecules," <i>Molecular Recognition: Chemical and Biological Problems</i> , Royal Society of Chemistry, Special Pub No. 78:182-196 (1989).
	Benson et al., "An enzyme-substrate complex involved in bacterial cell wall biosynthesis," <i>Nat Struct Biol.</i> 1995 Aug;2(8):644-53.
	Blundell et al., <i>Protein Crystallography</i> , Academic Press, New York, NY; title page, publication page, and table of contents only, 8 pages (1976)
	Böhm, "The computer program LUDI: a new method for the de novo design of enzyme inhibitors," <i>J Comput Aided Mol Des.</i> 1992 Feb;6(1):61-78.
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EXAMINER	Date Considered
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Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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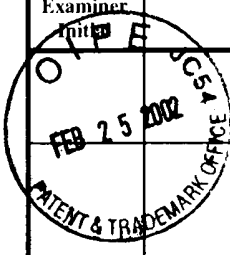
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	Cowan et al., "Improvement of Macromolecular Electron-Density Maps by the Simultaneous Application of Real and Reciprocal Space Constraints," <i>Acta Crystallogr D Biol Crystallogr</i> . 1993 Jan 1;49(1):148-157.
	Cowan et al., "Miscellaneous algorithms for density modification," <i>Acta Crystallogr D Biol Crystallogr</i> . 1998 Jul 1;54(4):487-93.
	Dai et al., "Crystal structure of <i>Arabidopsis thaliana</i> NADPH dependent thioredoxin reductase at 2.5 Å resolution," <i>J Mol Biol</i> . 1996 Dec 20;264(5):1044-57.
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	Eisen et al., "HOOK: a program for finding novel molecular architectures that satisfy the chemical and steric requirements of a macromolecule binding site," <i>Proteins: Struct. Funct. Genet</i> . 1994 Jul;19(3):199-221.
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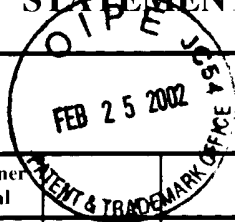
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Examiner Initials	Document Description
	Kuntz et al., "A geometric approach to macromolecule-ligand interactions," <i>J Mol Biol.</i> 1982 Oct 25;161(2):269-88.
	Kuriyan et al., "Crystallization and preliminary x-ray characterization of thioredoxin reductase from <i>Escherichia coli</i> ," <i>J Biol Chem.</i> 1989 Aug 5;264(22):12752-3.
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	Miranker et al., "Functionality maps of binding sites: a multiple copy simultaneous search method," <i>Proteins: Struct. Funct. Genet.</i> 1991;11(1):29-34.
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	Nishibata et al., "Automatic creation of drug candidate structures based on receptor structure. Starting point for artificial lead generation," <i>Tetrahedron</i> , 1991;47(43):8985-90.

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	Otwinowski, "Maximum likelihood refinement of Heavy atom parameters," <i>Isomorphous replacement and anomalous scattering - Proceedings of the CCP4 Study Weekend 25-26 January 1991</i> , (W. Wolf et al., eds.) Science and Engineering Research Counsel, Daresbury Laboratory, Warrington, U.K. (1991) pp. 80-86.
	Ramakrishnan et al., "Crystal structure of globular domain of histone H5 and its implications for nucleosome binding," <i>Nature</i> . 1993 Mar 18;362(6417):219-23.
	Rossmann, ed., <i>The Molecular Replacement Method - A Collection of Papers on the Use of Non-Crystallographic Symmetry</i> , Intl. Sci. Rev. Ser. No. 13, Gordon & Breach, New York, NY; title page, publication page, and table of contents only, 6 pages (1972).
	Sack, "CHAIN - A Crystallographic Modeling Program," <i>J Molecular Graphics</i> . 1988 Dec; 6(4):224-5.
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	Wyckoff et al., eds., <i>Methods in Enzymology Vol. 115 - Diffraction Methods for Biological Macromolecules</i> , Academic Press, Orlando, FL; title page, publication page, and table of contents only, 4 pages (1985).

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